



EPA's Final Rule to Reduce Methane and Other Harmful Pollution from Oil and Natural Gas Operations

February 8th, 2024

Methane Rule Overview – Super Emitters



Crude Oil and Natural Gas Operations: Where EPA's Rules Apply

Production & Processing

EPA's methane proposal covers equipment & processes at:

1. Onshore well sites
2. Storage tank batteries
3. Gathering & boosting compressor stations
4. Natural gas processing plants

Natural Gas Transmission & Storage

EPA's methane proposal covers equipment & processes at:

5. Compressor stations
6. Storage tank batteries

Distribution *(not covered by EPA rules)*

7. Distribution mains/services
8. City gate
9. Regulators and meters for customers

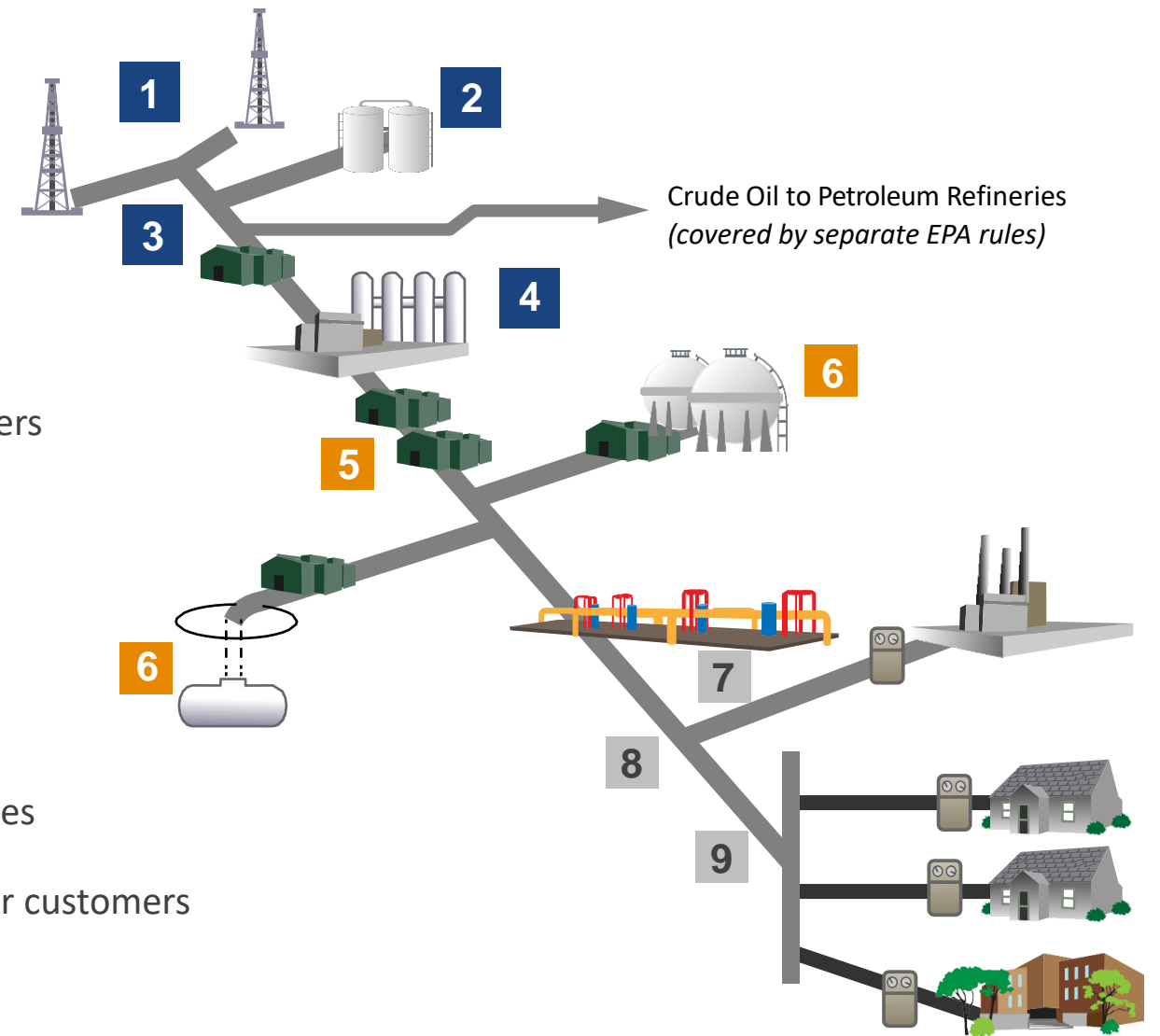
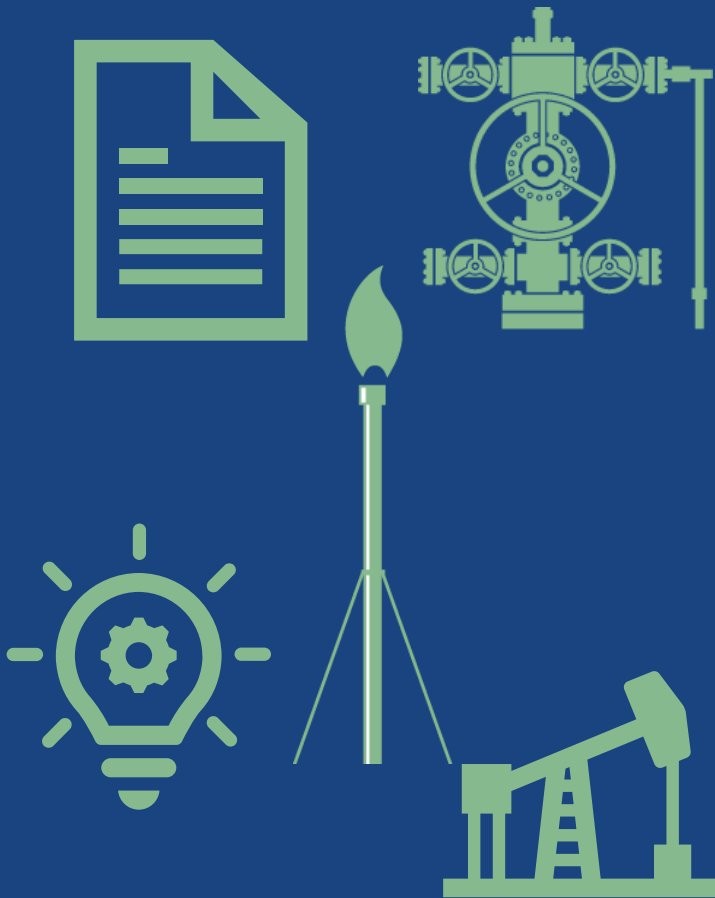


Figure adapted from American Gas Association and EPA's Natural Gas STAR Program

Final Rule: Key Improvements



Incentivizes Alternative Technology

- Promotes the use of innovative/sensitive technologies to find and reduce emissions faster and more efficiently

Strengthens Requirement for Associated Gas

- But provides industry with the time and flexibility needed to cost-effectively meet them

Super Emitters

- New program designed by EPA to address Super Emitters

Applicability and Effective Date



Subpart	Source Type	Applicable Dates
40 CFR part 60, subpart 0000	New, modified, or reconstructed sources	After August 23, 2011, and on or before September 18, 2015
40 CFR part 60, subpart 0000a	New, modified, or reconstructed sources	After September 18, 2015, and on or before December 6, 2022
40 CFR part 60, subpart 0000b	New, modified, or reconstructed sources	After December 6, 2022
40 CFR part 60, subpart 0000c	Existing sources	On or before December 6, 2022

The effective date for this ruling is 60 days after *Federal Register* publication

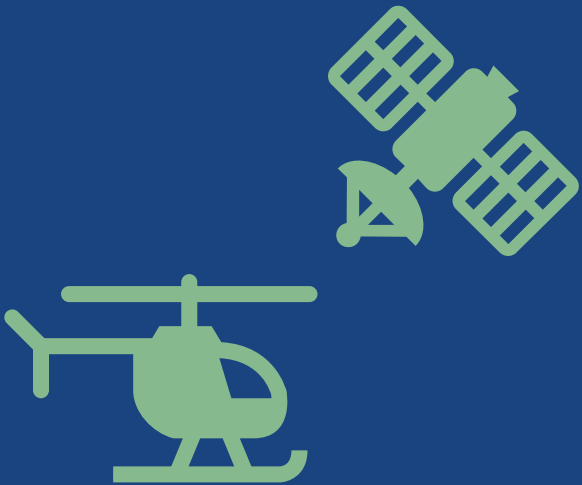
The Super Emitter Program: Background

Leverages 3rd party expertise to find large leaks and releases known as “super emitters”

EPA will provide a strong oversight role and ensure the program operates with a high degree of integrity, transparency, and accountability

Only EPA-approved remote-sensing technologies may be used.

EPA will make super emitter data publicly available on a timely basis



The Super Emitter Program: Background



A Super-Emitter event is an emission event which represents an emission that is >100 kg/hr and that may have been emitted from one or more of the following:

- An affected facility or associated equipment subject to regulation under NSPS 0000, 0000a, or 0000b
- A designated facility or associated equipment subject to a state or Federal Plan promulgated pursuant to EG 0000c
- An unregulated source

Oil and Natural Gas Sources Covered by EPA's Final New Source Performance Standards (NSPS) and Emissions Guidelines, by Site

Location and Equipment or Process Covered	Required to or Would Be Required to Reduce Emissions under EPA Rules (if finalized as proposed)	Rules that Apply			
		2012 NSPS for VOCs (0000)	2016 NSPS for Methane & VOCs (0000a)	2023 Final NSPS for Methane & VOCs (0000b)	2023 Final Emissions Guidelines for Methane (0000c)
Oil and Natural Gas Well Sites					
Completions of hydraulically fractured wells	✓	●	●	●	
Compressors at centralized tank batteries	✓			●	●
Fugitive emissions	✓		●	●	●
Liquids unloading	✓			●	● ¹
Pneumatic controllers	✓	●	●	●	●
Pneumatic pumps	✓		●	●	●
Storage vessels	✓	●	● ³	●	●
Sweetening units	✓	● ²	● ²	● ²	● ²
Associated gas from oil wells	✓			●	●
Natural Gas Gathering and Boosting Compressor Stations					
Compressors	✓	●	●	●	●
Fugitive emissions	✓		●	●	●
Pneumatic controllers	✓	●	●	●	●
Pneumatic pumps	✓			●	●
Storage vessels	✓	●	● ³	●	●
Sweetening units	✓	● ²	● ²	● ²	● ²
Natural Gas Processing Segment					
Compressors	✓	●	●	●	●
Fugitive emissions	✓		●	●	●
Pneumatic controllers	✓	●	●	●	●
Pneumatic pumps	✓		●	●	●
Storage vessels	✓	●	● ³	●	●
Sweetening units	✓	● ²	● ²	● ²	● ²
Transmission and Storage Segment					
Compressors	✓		●	●	●
Fugitive emissions	✓		●	●	●
Pneumatic controllers	✓		●	●	●
Pneumatic pumps	✓			●	●
Storage vessels	✓	●	● ³	●	●

All of the sources listed above are covered by EPA's Super Emitter Program

¹ Added in 2022 supplemental proposal

² Covered for SO₂ only

³ Covered for VOCs only

The Super Emitter Program: 3rd Party Identifiers



Qualifications for 3rd Party Identifiers

- Can be any independent entity
- Must use EPA-approved remote sensing technologies
- Are not authorized to enter a site

Advanced Methane Detection Technology Work Practices: Alternative Test Method for Methane Detection Technology



Alternative Test Method for Methane Detection Technology

- Using a new alternative test method provision, specific criteria for the review, evaluation, and potential use of advanced methane detection technology for use in periodic screening, continuous monitoring, and/or super-emitter detection can be used
- **To submit a request for an alternative test method for methane detection technology:**
 - Submissions through a public facing portal (www.epa.gov/emc/oil-and-gas-alternative-test-methods)
 - The Administrator will complete an initial completeness review of submissions within **90 days**
 - An approval/disapproval will be issued in writing within **270 days** after receiving a request

The Super Emitter Program: Certification of 3rd Party Identifiers



Certification of 3rd Party Notifier

- A third-party notifier certification request must be submitted to the *Leader, Measurement Technology Group, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, NC 27711.*

The certification request must include:

- General Identification
- Description of advanced methane detection technologies
- Curriculum vitae
- Standard operating procedure(s)
- Description of the system
- A Quality Management Plan

The Super Emitter Program: Certification of 3rd Party Identifiers



Upon approval

- **The entity must maintain the following records to retain certification status:**
 - Records for all surveys conducted or sponsored
 - Record of any notification to EPA
 - Records or identification of databases used
- **The Administrator will assess the completeness, reasonableness, and accuracy of the 3rd party's request based on the updated certification criteria in the final rule**
- **Once certified, the 3rd party notifier will receive a unique notifier ID which will be posted at www.epa.gov/emc/third-party-certifications**

The Super Emitter Program: Notification of Super-Emitter Events



3rd Party Notifications

- 3rd party notifiers must submit notifications to EPA with **15 calendar days** after detection of a super-emitter event
- **3rd party notifications must be submitted into the Super Emitter Program Portal (<https://www.epa.gov/super-emitter>) and must include:**
 - Unique 3rd party Notifier ID
 - Date of detection
 - Location of event in *latitude and longitude* coordinates
 - Owner(s) or operator(s) of an oil and natural gas facility within *50 meters* of the coordinates
 - Method used by the 3rd party to identify the owner(s) or operator(s)
 - Identification of the detection technology
 - Reference to the approval of the technology
 - Documentation (*i.e. imagery*) depicting the detected event
 - Quantified emission rate of the event in kg/hr
 - Attestation statement

The Super Emitter Program: Notification of Super-Emitter Events



Upon receipt of notification:

- EPA will evaluate the notification for completeness and accuracy
- When the notification meets these conditions, EPA must:
 - Assign a unique notification identification number
 - Provide notification to the owner(s)/operator(s)
 - Post the notification (except for the owner(s)/operator(s) attribution) at <https://www.epa.gov/super-emitter>
- **EPA then notifies the owner(s) or operator(s)**

After EPA notifies owner(s) or operator(s)

- Owner(s) or operator(s) must initiate an investigation with **5 days** and report the results to EPA within **15 days**.

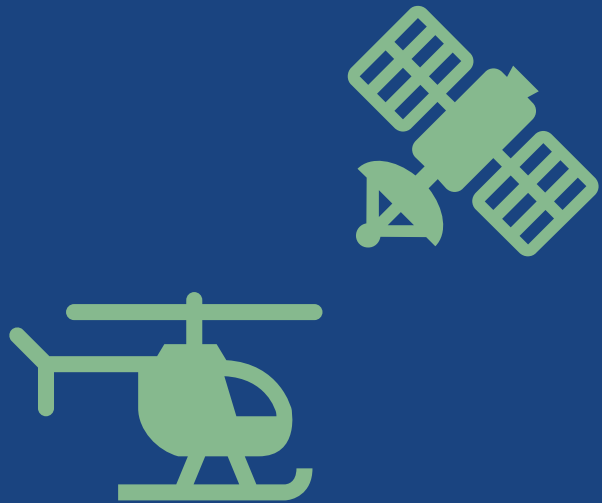
The Super Emitter Program: Identification of Super-Emitter Events



Actions to identify possible cause of Super Emitter event:

- Review any maintenance activities
- Review all monitoring data from control
- Review any fugitive emissions survey performed
- Review data from any continuous alternative technology systems
- Screen the entire well site, centralized production facility, or compressor station with OGI, EPA Method 21, or an alternative test method(s)

The Super Emitter Program: Identification of Super-Emitter Events



Reporting Super-Emitter Event

- The owner or operator must submit **an attestation** that the report is complete and accurate
- **The report must also include the following:**
 - Notification Report ID
 - Date and Time of *end of SE event*
 - Confirmation that you are the owner or operator of the oil and gas facility within the immediate area (i.e., 50 meters)
 - General identification for the facility
 - If the affected facilities/equipment is subject to NSPS 0000/a/b or EG 0000c
 - If **unable** to identify the source:
 - Confirmation that all possible investigations have been conducted
 - If **able** to identify the source:
 - ID of the source
 - If source is subject to NSPS 0000/a/b or EG 0000c

**More
information is
available on
EPA's website**



Website for the final rule:

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations/epas-final-rule-oil-and-natural-gas>